



### Course Summary

This course provides developers with the practical information and hands-on exercises that will enable them to build solutions on the Microsoft SharePoint 2010 platform. The course will be taught using C# 2010 and Visual Studio 2010 as well as SharePoint Designer 2010.

### Intended Audience:

This course is intended for developers, who will use Microsoft SharePoint 2010 in a team-based, medium-sized to large development environment. Members of the audience are expected to be .NET developers who are experienced C#.NET and Visual Studio 2008 (or higher).

### Prerequisites:

To ensure the best learning experience for all participants, the following pre-requisites **must be met** in order to participate in this course:

- Completion of, or complete familiarity with the topics in, the following courses:
  - "C# Fundamentals", "ASP.NET Fundamentals", "Advanced HTML, XHTML, & CSS", "Advanced XML"
- Experience performing end user tasks with SharePoint 2007 or SharePoint 2010 and an understanding of the purpose and use of the following:
  - Lists, Documents and Libraries, Personalizing a SharePoint page/site, Using MySites, Using SharePoint Designer

### Course Contents:

#### Introduction to the SharePoint 2010 Development Platform

- SharePoint 2010 as a Development Platform
  - Benefits, Features, & Requirements
- The SharePoint 2010 Storage Architecture
  - File Structure
    - Web Site Root
    - SharePoint Root
  - Databases
- The SharePoint 2010 Development API's
  - The Server Object Model
  - The Client Object Model
  - The Web Service Model
  - WCF Data Services

#### SharePoint 2010 Developer Tools (overview)

- Developing SharePoint Sites With SharePoint Designer 2010
- Developing SharePoint Solutions With Visual Studio 2010
- Windows PowerShell & The SharePoint Management Shell
- Packaging and Deploying SharePoint 2010 Solutions

#### Developing SharePoint 2010 Web Parts

- Developing Standard Web Parts
- Developing Connected Web Parts
- Developing Visual Web Parts
- Communication Between Web Parts
- Building Business Intelligence Dashboards
  - Using PerformancePoint

#### Working with SharePoint Server Object Model

- When is the SharePoint Server Object Model Appropriate?
- Working with SharePoint Sites Programmatically
- Working with SharePoint Lists Programmatically
- Working with List Data Programmatically

#### Creating Event Receivers and Application Settings

- Creating Event Receivers
- Working with Web.Config Programmatically

#### Accessing External Data Using Business Connectivity Services

- Business Connectivity Services Overview
- Developing External Content Types & Lists With SharePoint Designer
- Developing Business Connectivity Services Solutions With Visual Studio 2010

#### Developing SharePoint 2010 Workflows

- Creating Workflows with SharePoint Designer
- Creating Workflows with Visual Studio 2010

#### Working with SharePoint Client Object Model

- When is the SharePoint Client Object Model Appropriate?
- Overview of the SharePoint 2010 Client Object Model
- Working with the SharePoint 2010 Client Object Model in .NET Applications

#### Developing Interactive User Interfaces

- Creating Menu Items and Ribbon Controls
- Creating Client-Side Dialogs

#### Querying With LINQ to SharePoint

- Benefits of LINQ to SharePoint
- The SPMetal Command Line tool
- Utilizing the LINQ Classes in code

#### Developing Sandboxed Solutions

- Sandbox vs. Farm Solutions
- Sandboxing and User Solutions
- Restrictions for Sandboxed Solutions

#### Working with SharePoint Server Profiles and Taxonomy APIs

- User Profiles
- Taxonomies

#### Leveraging SharePoint Management Shell

- SharePoint Management Shell vs. Windows PowerShell
- Introduction to SharePoint Management Shell
  - Commandlets
- Deploying SharePoint Solution Packages
  - Registering Assemblies In The GAC
  - Adding/Removing Items From The Package
  - Creating The .wsp

#### Using The SharePoint 2010 Web Services

- When are the SharePoint Web Services Appropriate?
- Pro's & Con's Of The SharePoint Web Services
- Using the Lists Web Service
  - Referencing The Service
  - Choosing The WebMethod